

Explanatory notes: Flight data quality report

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Introduction

This report compares flight information appearing in CARDIT or PREDES messages with a global reference of flight details. All differences found are reported, per type of issue, with details on the mail concerned (consignment ID) and on the correction needed.

Issues with flight data occur typically when the postal operator does not keep its flight information fully up-to-date and uses flights or flight details that are not valid anymore.

For a project participant, flight information is taken from one source only:

- CARDIT, if CARDIT is actively sent by the project participant and the sending EDI address is on the POST*Net network;
- PREDES in all other cases.

The report is not based on a full month of data; instead, it is based on a sample. The sampling period is displayed in the top-right corner of the first page of the report.

Report organization

Five types of flight anomalies are reported:

1. Flight unknown
2. Flight invalid on day used
3. Incorrect origin and/or destination airport
4. Flight not valid on this day of week
5. Incorrect planned departure and/or arrival time

In order to keep the report short, for each anomaly, each flight is listed once only, even if it is used for several consignments, for CARDIT messages to several airlines and on different dates.

For anomalies 1,2, 3 and 5, a flight is identified by the airline code, flight number, origin and destination airports, departure and arrival times.

For anomaly 4 (flight not valid on this day of the week), a flight is identified by the above plus the departure weekday.

The aspect of the report is the same for all anomalies. The following columns are displayed:

Column	Description
EDI address	EDI address of the airline (information in CARDIT/PREDES)
order	Order of the flight in the list of flights (information in CARDIT/PREDES). Value 1 means that it is the first flight listed in CARDIT/PREDES: it is normally the flight out of the own country. Values 2 and above correspond to ongoing flights.
airline code	Airline code (information in CARDIT/PREDES)

flight number	Flight number (information in CARDIT/PREDES)
from	Origin airport code (information in CARDIT/PREDES)
to	Destination airport code (information in CARDIT/PREDES)
departure	Departure date and time (information in CARDIT/PREDES). The date format is yyyy-mm-dd
week day	Week day of the departure: 1 for Monday, 2 for Tuesday... 7 for Sunday.
arrival	Arrival date and time (information in CARDIT/PREDES). The date format is yyyy-mm-dd
correct flight details	Information from OAG. Details depend on the error type.
Consignment/ dispatch	The first consignment for this flight for which the error occurred (information in CARDIT) Or the first dispatch for this flight for which the error occurred (information in PREDES)

An anonymized sample report is shown below:

Flight issues in EDI messages - October 2022

Sampling period: 17-23 Oct 2022

Operator: [REDACTED]

Compliance summary:

1st flight:	total flights:	11	flights with issues:	3	percent compliant:	72.73
ongoing flight:	total flights:	13	flights with issues:	3	percent compliant:	76.92

Issues by type

Messages sent from: PF101												
Issue: 2 Flight invalid on day used												
EDI dest	order	Flight #	from	to	Departure	week day	Arrival	correct flight details	Consignment/dispatch			
AFR11	3	AF 344	CDG	YUL	2022-10-21 13:15	5	2022-10-21 14:55		[REDACTED]			
Issue: 4 Flight not valid on this day of week												
EDI dest	order	Flight #	from	to	Departure	week day	Arrival	correct flight details	Consignment/dispatch			
THT11	1	TN 102	PPT	LAX	2022-10-10 23:59	1	2022-10-11 10:50	Valid days: 6	[REDACTED]			
Issue: 5 Incorrect planned departure and/or arrival time												
EDI dest	order	Flight #	from	to	Departure	week day	Arrival	correct flight details	Consignment/dispatch			
AFR11	3	AF 1318	CDG	FRA	2022-10-21 15:35	5	2022-10-21 17:00	Valid dpt/arr times: 16:25/17:50	[REDACTED]			
AFR11	1	AF 77	PPT	LAX	2022-10-19 07:30	3	2022-10-19 17:40	Valid dpt/arr times: 07:40/18:45	[REDACTED]			
AFR11	2	AF 77	LAX	CDG	2022-10-19 21:30	3	2022-10-20 17:05	Valid dpt/arr times: 21:15/17:00	[REDACTED]			
THT11	1	TN 101	PPT	AKL	2022-10-19 07:55	3	2022-10-19 12:00	Valid dpt/arr times: 08:45/13:25	[REDACTED]			

Each flight anomaly is detailed below:

1. Flight unknown

The combination of airline code + flight number does not exist in the flight reference database.

For this anomaly, no suggestion is provided in the report: column 'correct flight details' is empty.

2. Flight invalid on day used

The flight exists in the reference database, but its validity ranges do not include the day when it is used. Typically, it may have been valid in the recent past, but it is not valid anymore. Or it is not yet valid, or is temporarily not valid (in between two validity periods).

For this anomaly, no suggestion is provided in the report: column 'correct flight details' is empty.

3. Incorrect origin and/or destination airport

The flight is valid, but its origin and/or destination airport is/are not.

For this anomaly, column 'correct flight details' indicates the valid airport to be used at origin and/or destination.

4. Flight not valid on this day of week

The flight is valid, but not on the weekday (Monday to Sunday) it is used. For this anomaly, column 'correct flight details' indicates the valid days for the flight (1: Monday, 2: Tuesday... 7: Sunday).

5. Incorrect planned departure and/or arrival time

The flight is valid, but its departure and/or arrival time is incorrect. For this anomaly, column 'correct flight details' provides the correct departure and arrival times.

This error is not raised in case the difference between the time in the message and in the reference is less or equal to 10 minutes.